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EXAMINER				
BATISTA, MARCOS				
ART UNIT		PAPER NUMBER		
2617				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

09/412,122

Applicant(s)

GUTIERREZ, JR. ET AL.

Examiner

MARCOS BATISTA

Art Unit

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 October 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 18-29, 33-42 and 46-57 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 18-29, 33-42, 46-57 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SE-02)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. This Action is in response to Applicant's amendment filed on 10/28/2010. Claims 18-29, 33-42, 46-57 are still pending in the present application. This Action is made **FINAL**.

Claim Objections

2. **Claims 18-20** are objected to because of the following informalities: In a reply to a non-final action filed on 10/28/2010, the first line of the claim set reads "1-20 (cancelled)", however, claims 18-20 are still being claimed in the rest of the claim set. The first line of the Applicant's argument filed on 10/28/2010 reads "Claims 18-29, 33-42 and 46-57 are pending in the application." It appears that claims 18-20 are still pending, and not cancelled as stated in the claim set. Appropriate correction is required.

Response to Arguments

3. Applicant's arguments filed on 10/28/2010 have been fully considered but they are not persuasive.

After carefully revising the office action pertinent to the present response and remarks, the following main point(s) have been identified:

- 1) The Applicant's remarks at page 14 lines 10-12 states:

"Tsunehara, however, does not teach or disclose power control bits that correspond to a reverse link common channel and that direct a subscriber unit to adjust its reverse link transmission power."

Regarding point 1), the above limitation basically means that the base station will transmit power control bits to the mobile stations so that each mobile station will adjust its power transmission of a shared uplink channel.

Tsunehara discloses a base station scheduling uplink transmission channels and time slots for a plurality of mobile stations. Tsunehara also discloses the base station transmitting power control signals (i. e., power control bits) to all the mobile stations in order to command the mobile stations to change the uplink transmission power. Furthermore, Tsunehara at column 3 lines 55 through 61 clearly discloses shared channels used by mobile terminals one of which is an uplink (i, e., reverse) channel. The mobile terminals use this common channel to exchange channel reservation with the base station. The power control bit is clearly disclosed at Col. 7 lines 29-41.

Tsunehara, Col. 3 line 62 – col. 4 line 2:

(5) A mobile terminal having a data transmission request transmits a reservation packet 4 at a desired timing by using the reservation channel 1. The base station performs scheduling of received reservation packets. The base station selects (schedules) a channel and a time slot (a time slot 7 is defined in an uplink traffic channel 3) via which each mobile terminal can transmit data, from a plurality of uplink traffic channels 3.

Tsunehara , Col. 7 lines 29-41:

(30) The base station inserts common transmission power control signals 142a, 142b, 142c, . . . into a common answer channel shared by mobile terminals in the area and transmits them. The common transmission power control signal 142 contains transmission power control signals for the respective traffic channels 1 to n. Each of the mobile terminals 1 to n transmitting data packets 1 to n to the base station derives the transmission power control signal of the traffic channel now in use by the mobile terminal, from the common transmission power control signals 142a, 142b, 142c, . . . In

accordance with the derived transmission power control signal, the mobile terminal changes the transmission power of the data packet.

2) The Applicant's remarks at page 15 lines 20-24 states:

"Diachina does not teach or disclose a power control channel, nor does it teach or disclose power control generally, in contrast to Applicant's claims. Further, the BRI flags do not provide 'inhibit bits,' but instead refer to downlink operations by the "base station, mobile telephone service center and internetworking function (BMI)." (see Diachina 14:15-20)."

Regarding point **2)**, Diachina was cited for teaching the limitation recited in claimed invention of "a plurality of inhibit bits, each of the plurality of inhibit bits corresponding to a reverse link common channel of the plurality of reverse link common channels and indicating whether a dedicated burst mode has been scheduled for the reverse link common channel," which is the base for the Applicant's argument above. Diachina in the cited portion teaches BRI flags are used to indicate to the mobile station whether a particular slot was already reserved. The mobile stations can then use the assigned slot for uplink using the shared channel. The BRI flags inherently indicate to the mobile station, which time slots are prohibited for being used since those time slots are assigned to other mobile stations.

Diachina, Col. 6 lines 34-39:

(11) The random access channel RACH is used to request access to the system. The attributes of this channel are unidirectional (uplink), shared, point-to-point, and acknowledged. Contention resolution and/or collision avoidance information is provided on the forward subchannel corresponding to any given frame sent on the RACH.

Diachina, Col. 9 lines 41-47:

(20) The layer 2 protocol also contains a plurality of flags. Forward shared control feedback (SCF) flags are used to control transmissions on the RACH. A busy/reserved/idle (BRI) flag is used to indicate whether its corresponding uplink RACH slot is Busy, Reserved or Idle. Six bits are used for these flags and the different conditions are encoded as shown in the table below:

Diachina, Col. 11 lines 44-52:

(27) When a mobile station is in the "start reserved access" state, it looks at BRI and PE information in all downlink slots of the current DCC, regardless of subchannels, for a slot where BRI=Reserved and a PE match occurs, which will be explained below. The base station (BS) can assign a reserved slot for a given mobile station MS regardless of which subchannel the MS may have previously used. If a mobile station finds this slot, it sends the first unit of its message in the corresponding uplink RACH subchannel.

Therefore, the argued features are written such that they read upon the cited reference(s).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.

4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
7. **Claims 18-21, 25, 33, 34, 38, 46-49 and 53** are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsunehara et al. (US 6307844 B1), hereafter "Tsunehara," in view of Diachina et al. (US 5694391 A), hereafter "Diachina."

Consider **claim 18**, Tsunehara discloses a base station that supports communications with a plurality of subscriber units in a CDMA wireless communication system, the base station comprising (**see fig. 3, col. 4 lines 20-28**): an antenna (**30**); a radio frequency interface coupled to the antenna (**32**); a spreader/despreader coupled to the radio frequency interface(**48/33**); a coder/decoder coupled to the spreader/despreader (**56a/36**); processing circuitry coupled to the coder/decoder (**41**); memory coupled to the processing circuitry(**38**); a base station controller interface coupled to the processing circuitry (**40**); and the base station supporting a power control channel comprising (**see fig. 3, col. 4 lines 20-28**): a plurality of power control bits,

each power control bit corresponding to a reverse link common channel of the plurality of reverse link common channels and directing a respective subscriber unit to adjust its reverse link transmission power (**see fig. 9, abstract, col. 1 lines 48-63, col. 7 lines 43-50**).

Tsunehara, however, does not particular refer to a plurality of inhibit bits, each of the plurality of inhibit bits corresponding to a reverse link common channel of the plurality of reverse link common channels and indicating whether a dedicated burst mode has been scheduled for the reverse link common channel.

Diachina, in analogous art, teaches a plurality of inhibit bits (**e.g., BRI flags**), each of the plurality of inhibit bits corresponding to a reverse link common channel of the plurality of reverse link common channels and indicating whether a dedicated burst mode has been scheduled for the reverse link common channel (**see col. 3 lines 18-23, col. 6 lines 35-40, col. 9 lines 41-45, col. 11 lines 31-43** - where Diachina teaches using a plurality of Busy/Reserved /Idle Flags to indicate transmission access to a plurality of mobile stations on a uplink shared channel).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the invention of Tsunehara and have it include a plurality of inhibit bits, each of the plurality of inhibit bits corresponding to a reverse link common channel of the plurality of reverse link common channels and indicating whether a dedicated burst mode has been scheduled for the reverse link common channel, as taught by Diachina. The motivation would have been in order to signal uplink

transmission access to a plurality of mobile stations on a shared channel (**see col. 3 lines 18-23, col. 6 lines 35-40, col. 9 lines 41-45, col. 11 lines 31-43**).

Consider **claim 19**, Tsunehara as modified by Diachina discloses claim 18 above. Tsunehara also discloses wherein a power control bit of the plurality of power control bits are transmitted by the base station during a message capsule of a respective reverse link common channel (see col. 3 lines 55-61).

Consider **claim 20**, Tsunehara as modified by Diachina discloses claim 18 above. Diachina also discloses wherein an inhibit bit corresponding to a respective reverse link common channel is transmitted during an idle time of the respective reverse link common channel (see col. 3 lines 18-23, col. 6 lines 35-40, col. 9 lines 41-45, col. 11 lines 31-43). The motivation would have been in order to signal uplink transmission access to a plurality of mobile stations on a shared channel (see col. 3 lines 18-23, col. 6 lines 35-40, col. 9 lines 41-45, col. 11 lines 31-43).

Consider **claim 21**, this claim discusses the same subject matter as claim 18. Therefore, it has been analyzed and rejected based upon the rejection to claim 18.

Consider **claim 25**, Tsunehara as modified by Diachina discloses claim 18 above. Diachina also discloses wherein the power control signal further comprises: a third power control/inhibit bit stream that corresponds to a third reverse link common

channel; and a fourth power control/inhibit bit stream that corresponds to a fourth reverse link common channel (see col. 3 lines 18-23, col. 6 lines 35-40, col. 9 lines 41-45, col. 11 lines 31-43). The motivation would have been in order to signal uplink transmission access to a plurality of mobile stations on a shared channel (see col. 3 lines 18-23, col. 6 lines 35-40, col. 9 lines 41-45, col. 11 lines 31-43).

Consider **claim 33**, this claim discusses the same subject matter as claim 18. Therefore, it has been analyzed and rejected based upon the rejection to claim 18.

Consider **claim 34**, this claim discusses the same subject matter as claim 18. Therefore, it has been analyzed and rejected based upon the rejection to claim 18.

Consider **claim 38**, this claim discusses the same subject matter as claim 25. Therefore, it has been analyzed and rejected based upon the rejection to claim 25.

Consider **claim 46**, Tsunehara discloses a method for transmitting power control bits from a base station to a plurality of subscriber units in a code division multiple access wireless communication system, the common power control bits causing the subscriber units to manage their reverse link transmissions on a plurality of reverse link common channels, the method comprising (**see fig. 9, abstract, col. 1 lines 48-63, col. 7 lines 43-50**): determining a plurality of power control bits, each power control bit corresponding to a respective reverse link common channel of the plurality of reverse link common channels and directing a respective subscriber unit to adjust its reverse

link transmission power (see fig. 9, abstract, col. 1 lines 48-63, col. 7 lines 43-50); assembling the plurality of power control bits and the plurality of inhibit bits into a common bit stream; and transmitting the common bit stream to the plurality of subscriber units (see fig. 9, abstract, col. 1 lines 48-63, col. 7 lines 43-50).

Tsunebara, however, does not particular refer to determining a plurality of inhibit bits, each of the plurality of inhibit bits corresponding to a respective reverse link common channel of the plurality of reverse link common channels and indicating whether a dedicated burst mode has been scheduled for the reverse link common channel.

Diachina, in analogous art, teaches determining a plurality of inhibit bits (e.g., **BRI Flags**), each of the plurality of inhibit bits corresponding to a respective reverse link common channel of the plurality of reverse link common channels and indicating whether a dedicated burst mode has been scheduled for the reverse link common channel (see col. 3 lines 18-23, col. 6 lines 35-40, col. 9 lines 41-45, col. 11 lines 31-43 - where Diachina teaches using a plurality Busy/Reserved /Idle Flags to indicate transmission access to a plurality of mobile stations on a uplink shared channel).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the invention of Tsunebara and have it include determining a plurality of inhibit bits, each of the plurality of inhibit bits corresponding to a respective reverse link common channel of the plurality of reverse link common channels and indicating whether a dedicated burst mode has been scheduled for the reverse link common channel, as taught by Diachina. The motivation would have been

in order to signal uplink transmission access to a plurality of mobile stations on a shared channel (see col. 3 lines 18-23, col. 6 lines 35-40, col. 9 lines 41-45, col. 11 lines 31-43).

Consider **claim 47**, this claim discusses the same subject matter as claim 19. Therefore, it has been analyzed and rejected based upon the rejection to claim 19.

Consider **claim 48**, this claim discusses the same subject matter as claim 20. Therefore, it has been analyzed and rejected based upon the rejection to claim 20.

Consider **claim 49**, this claim discusses the same subject matter as claim 46. Therefore, it has been analyzed and rejected based upon the rejection to claim 46.

Consider **claim 53**, this claim discusses the same subject matter as claim 25. Therefore, it has been analyzed and rejected based upon the rejection to claim 25.

8. **Claims 22, 23, 24, 35, 36, and 50-52** are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsunehara et al. (US 6307844 B1), hereafter "Tsunehara," in view of in view of Diachina et al. (US 5694391 A), hereafter "Diachina," further in view of Mucke et al. (US 5548616 A), hereafter "Mucke."

Consider claim 22, Tsunehara as modified by Diachina discloses claim 18 above. Tsunehara, however, alone or combined does not particular refer to wherein the second power control/inhibit bit stream is offset from the first power control/inhibit bit stream by a fixed offset.

Mucke, in analogous art, teaches wherein the second power control/inhibit bit stream is offset from the first power control/inhibit bit stream by a fixed offset (**see col. 5 lines 28-36**).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the invention of Tsunehara as modified by Diachina and have it include wherein the second power control/inhibit bit stream is offset from the first power control/inhibit bit stream by a fixed offset, as taught by Mucke. The motivation would have been in order to provide a circuit arrangement that provides an adaptive transmitter power control function for use with a spread spectrum transmitter (**see col. 2 lines 56-59**).

Consider **claim 23**, Tsunehara as modified by Diachina discloses claim 18 above. Tsunehara, however, alone or combined does not particular refer to wherein the second power control/inhibit bit stream is offset from the first power control/inhibit bit stream by a pseudo-random offset.

Mucke, in analogous art, teaches wherein the second power control/inhibit bit stream is offset from the first power control/inhibit bit stream by a pseudo-random offset (**see col. 1 lines 21-31, col. 5 lines 28-36**). The motivation would have been in order to

provide a circuit arrangement that provides an adaptive transmitter power control function for use with a spread spectrum transmitter (**see col. 2 lines 56-59**).

Consider **claim 24**, Tsunehara as modified by Diachina discloses claim 18 above. Tsunehara, however, alone or combined does not particular refer to wherein the second power control/inhibit bit stream is offset from the first power control/inhibit bit stream by a varying offset that is based upon a counter value.

Mucke, in analogous art, teaches to wherein the second power control/inhibit bit stream is offset from the first power control/inhibit bit stream by a varying offset that is based upon a counter value (**see col. 3 lines 1-16**). The motivation would have been in order to provide a circuit arrangement that provides an adaptive transmitter power control function for use with a spread spectrum transmitter (**see col. 2 lines 56-59**).

Consider **claim 35**, this claim discusses the same subject matter as claim 22. Therefore, it has been analyzed and rejected based upon the rejection to claim 22.

Consider **claim 36**, this claim discusses the same subject matter as claim 23. Therefore, it has been analyzed and rejected based upon the rejection to claim 23.

Consider **claims 50-52**, these claims discuss the same subject matter as claims 22-24 respectively. Therefore, they have been analyzed and rejected based upon the rejection to claims 22-24.

Allowable Subject Matter

9. **Claims 26-29, 39-42 and 54-57** objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Marcos Batista, whose telephone number is (571) 270-5209. The Examiner can normally be reached on Monday-Friday from 8:00am to 5:00pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Rafael Pérez-Gutiérrez can be reached at (571) 272-7915. The fax phone

number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free) or 703-305-3028.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist/customer service whose telephone number is (571) 272-2600.

/Marcos Batista/
Examiner
12/04/2010

/LESTER KINCAID/
Supervisory Patent Examiner, Art Unit 2617